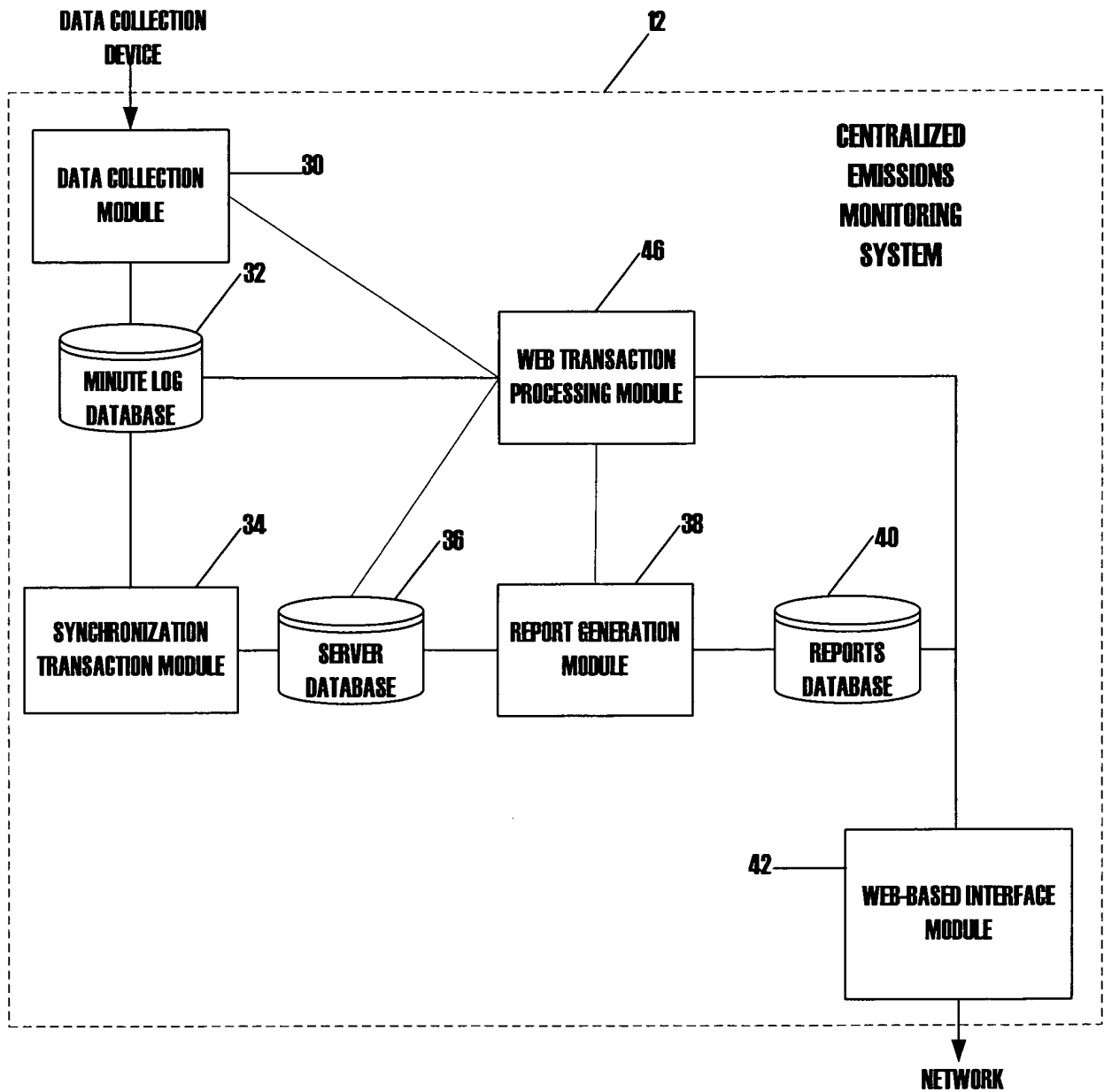
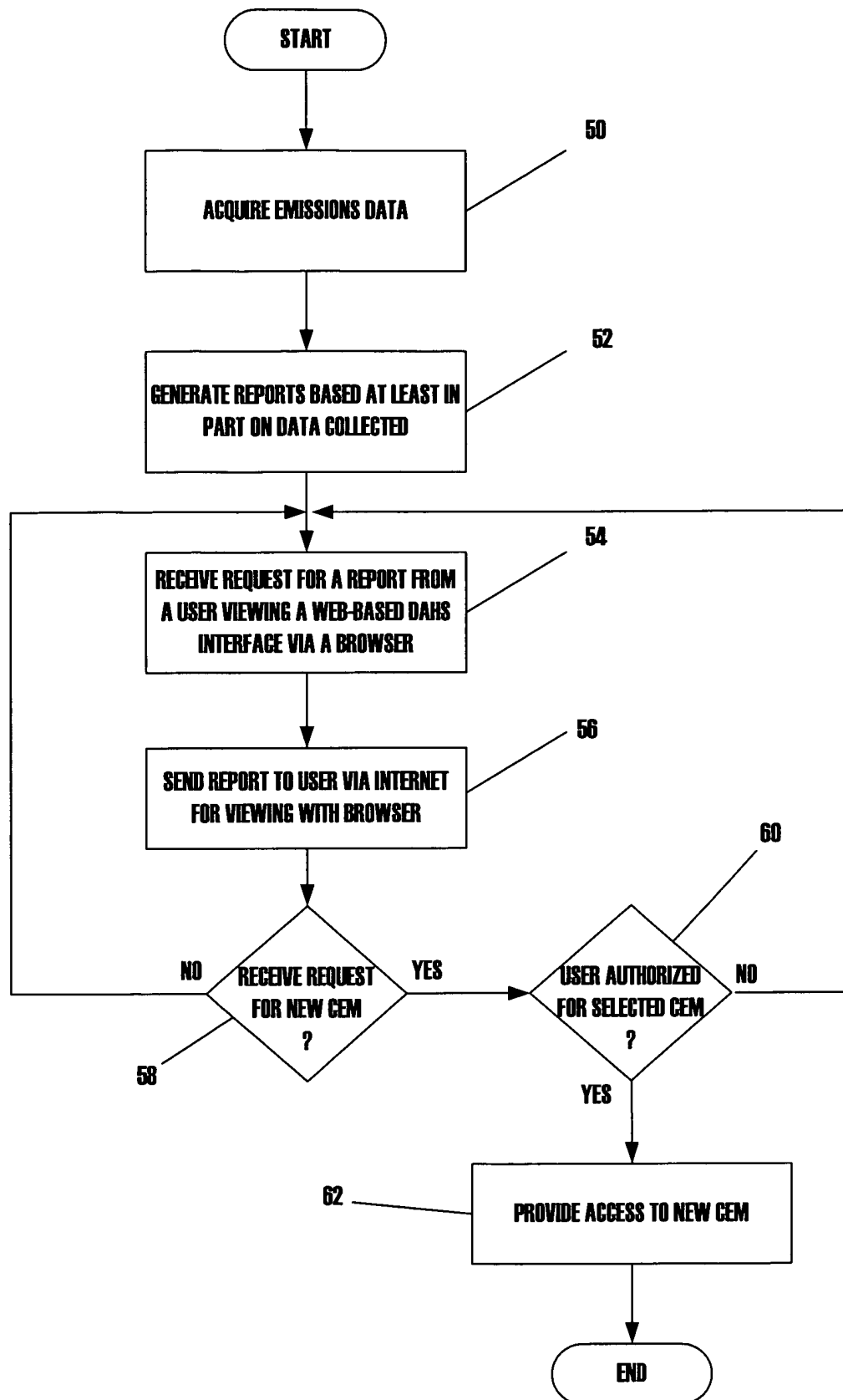


**FIG. 1**





**FIG. 3**

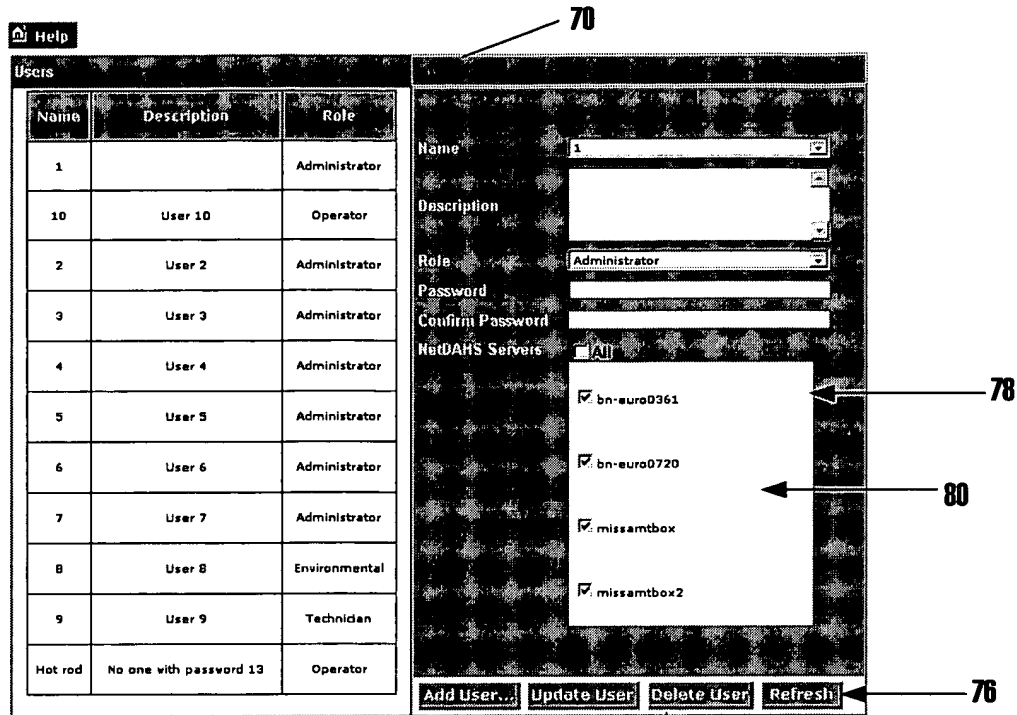


FIG. 4

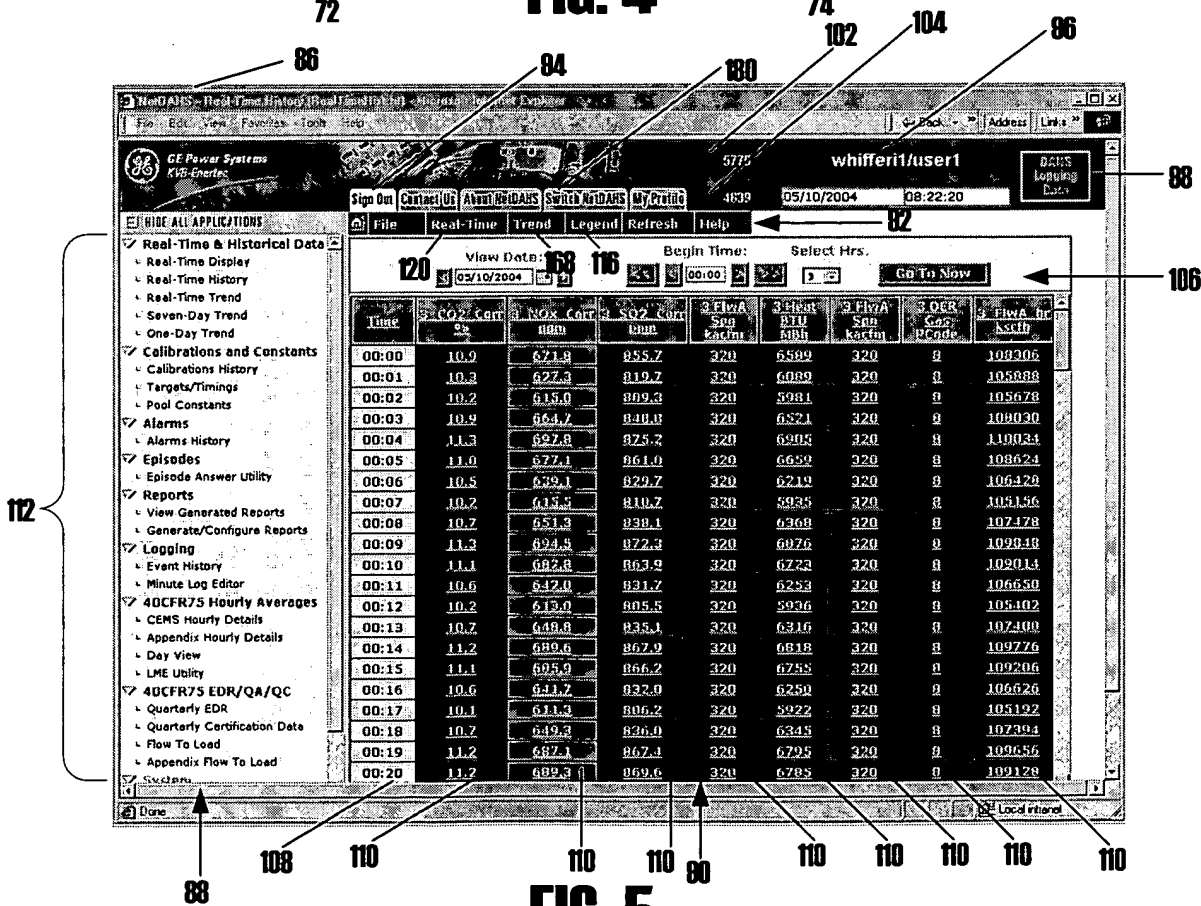


FIG. 5

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State Field Value	Text Color	Priority
Ok Data	Green	1
HW Fail	*HRed	4
Data Error	Maroon	5
Task Error	*HRed	6
Discrd Data	Orange	6
Proc Off	Green	2
Comm Fail	*HRed	3
In Calib	Blue	9
Zero Fail	*HRed	8
Mid Fail	*HRed	8
Span Fail	*HRed	8
Calib Fail	*HRed	8
Zero Cal	*HGreen	8
Mid Cal	Aqua	9
Span Cal	Fuschia	9
Multi Cal Bits Set	Fuschia	9
Old Data	Teal	11
Untouched	LtGray	12
OOO Part 75	*HRed	7
OOO Part 80	*HRed	7
Edited Data	*HWhite	14
Recovered	*HRed	13
Out of Control	*HRed	7
Strangecal	*HWhite	10

\* High Intensity

FIG. 6

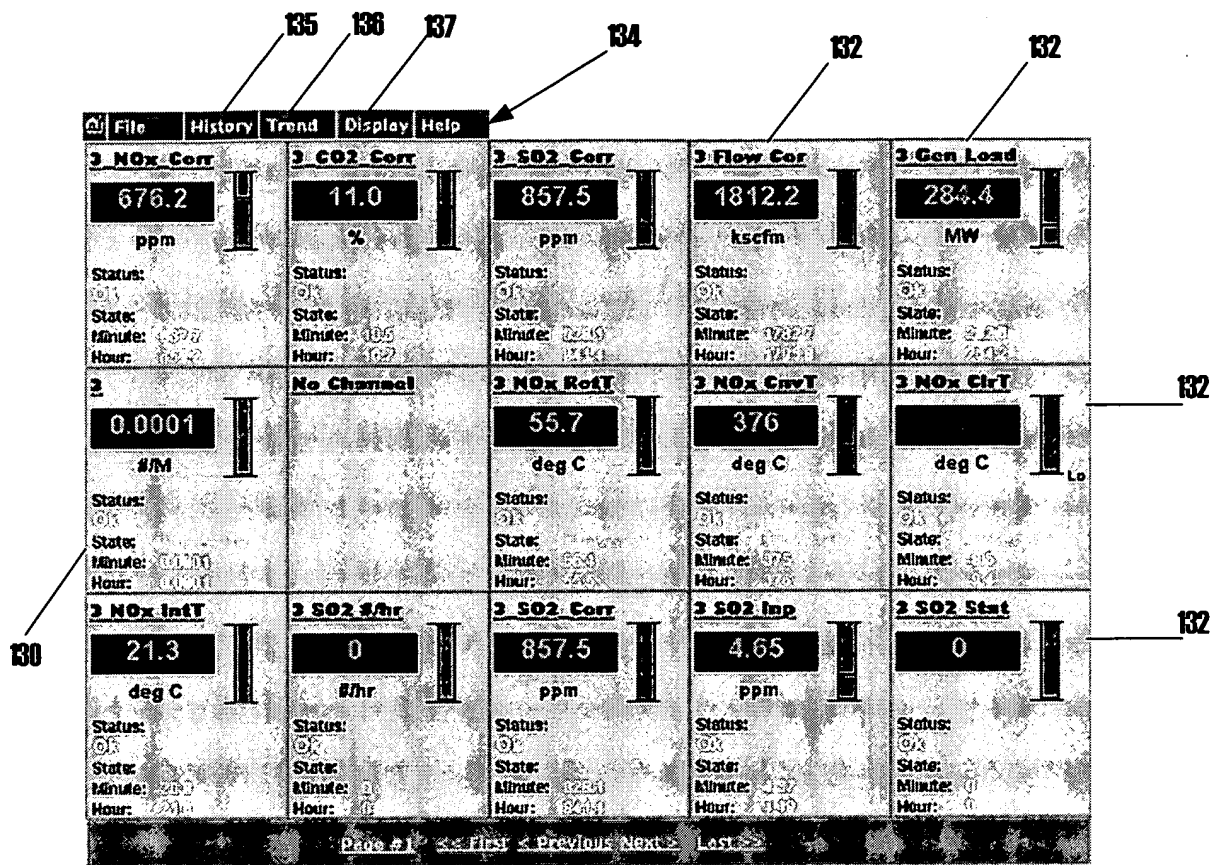


FIG. 7

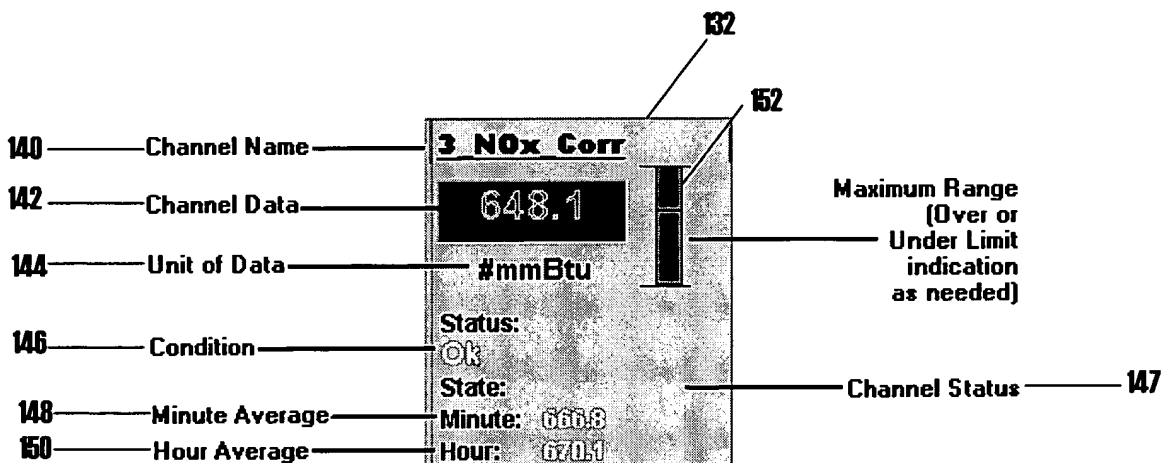
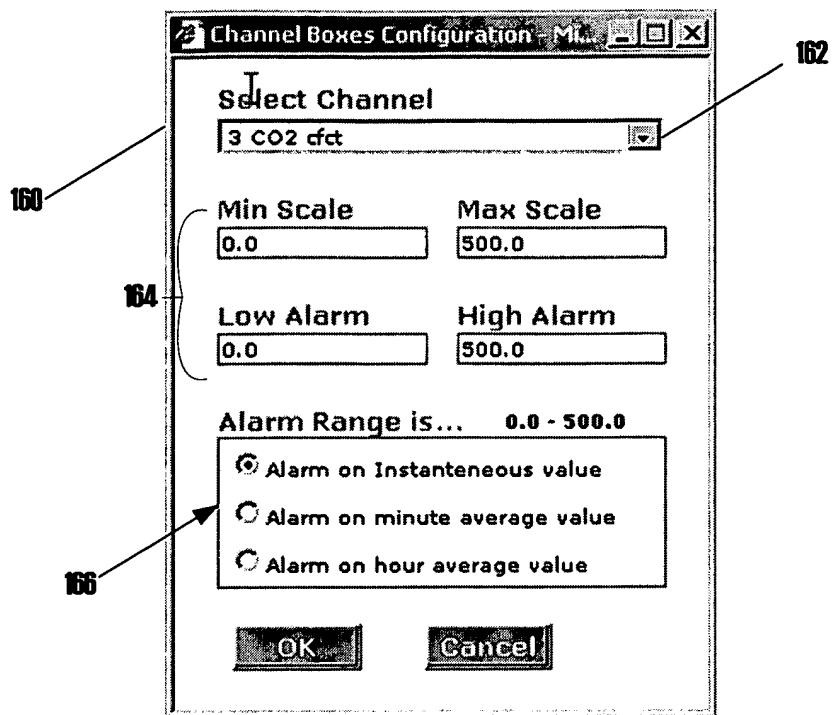


FIG. 8



**FIG. 9**

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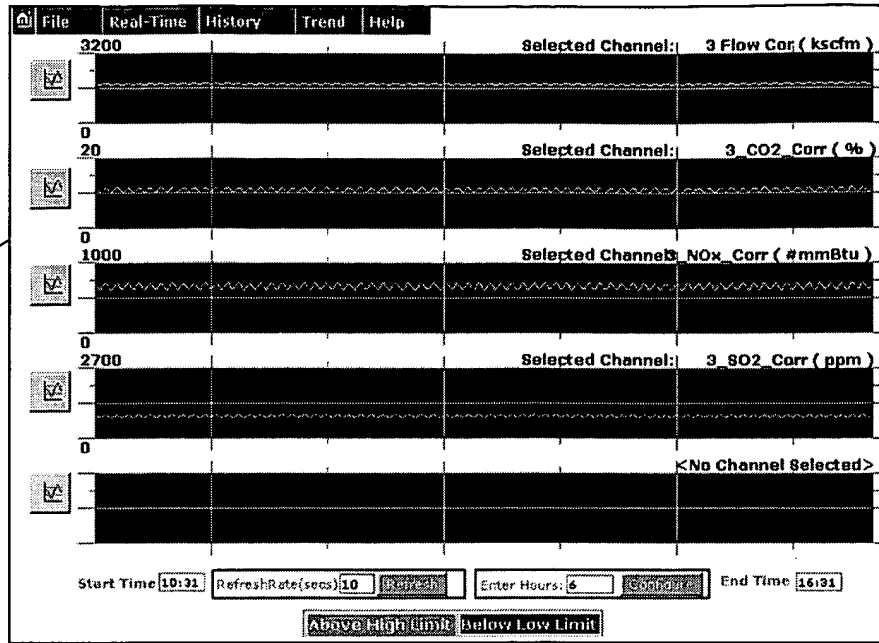


FIG. 10

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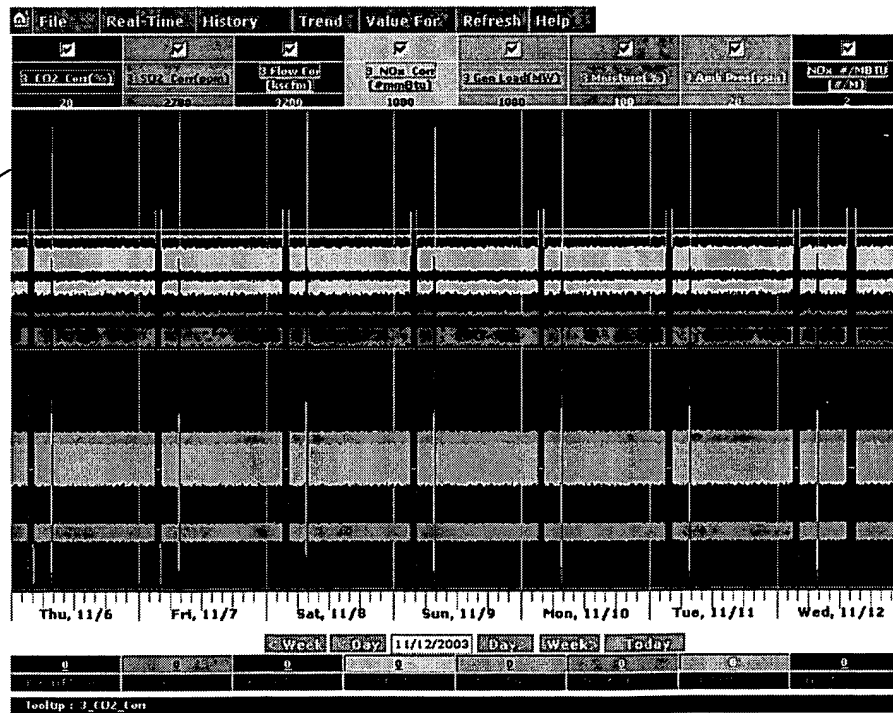
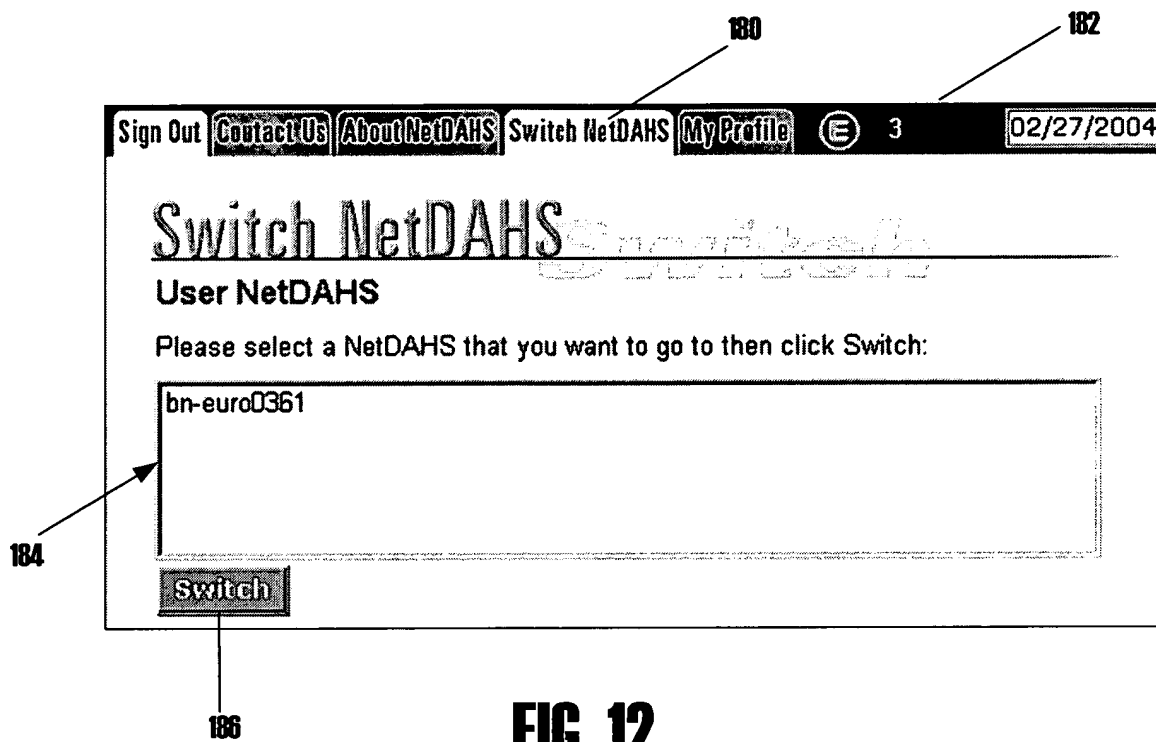


FIG. 11





NetDAHS - Alarm History - Microsoft Internet Explorer

Select	Options	Statistics	Filter	Action Items	Legend	Help
Page 1						
<input type="checkbox"/> All	In Alarm	Out Alarm	Ack Alarm	By	Alarm ID	Description
<input type="checkbox"/>						
<input type="checkbox"/>	08/21/2003 07:37:24	07:37:24			3 SO2 Corr High	SO2 Corr Exceeds limit - 640
<input type="checkbox"/>						
<input type="checkbox"/>	08/21/2003 07:36:59	07:37:09			3 SO2 Corr High	SO2 Corr Exceeds limit - 640
Page 1						

FIG. 13

NetDAHS - Episode Answer - Microsoft Internet Explorer

Select	Filter	Statistics	Answer Episodes	Re-generate Episodes	Legend	Help		
Page 2								
<input type="checkbox"/> All	Episode Name	Start Time	End Time	Type	Real Value	Value Limit	Status	By
<input type="checkbox"/>	Pa Low Temp	02/25/2003 02:33:00	02/25/2003 02:33:00	Under Limit	1752.5	1753	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/25/2003 01:30:00	02/25/2003 01:35:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/25/2003 01:00:00	02/25/2003 01:05:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	Pa Low Temp	02/25/2003 00:47:00	02/25/2003 00:47:00	Under Limit	1752.3	1753	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 23:54:00	02/24/2003 23:59:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 23:24:00	02/24/2003 23:29:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	Pa Low Temp	02/24/2003 21:30:00	02/24/2003 21:30:00	Under Limit	1752.3	1753	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 20:42:00	02/24/2003 20:47:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 20:12:00	02/24/2003 20:17:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 19:06:00	02/24/2003 19:11:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 17:00:00	02/24/2003 17:05:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	Pa Low Temp	02/24/2003 16:27:00	02/24/2003 16:27:00	Under Limit	1752.5	1753	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 15:24:00	02/24/2003 15:29:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 13:18:00	02/24/2003 13:23:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 11:42:00	02/24/2003 11:47:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 11:12:00	02/24/2003 11:17:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 10:36:00	02/24/2003 10:41:00	Over Limit	14.8	14.7	UnAns	DAHS
<input type="checkbox"/>	CCDC Opacity	02/24/2003 10:06:00	02/24/2003 10:11:00	Over Limit	14.8	14.7	UnAns	DAHS

FIG. 14

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<input type="button" value="Select"/> <input type="button" value="Filter"/> <input type="button" value="Statistics"/> <input type="button" value="Answer Episodes"/> <input type="button" value="Re-generate Episodes"/> <input type="button" value="Legend"/> <input type="button" value="Help"/>								
Page 1 of 10								
<input type="checkbox"/> All	Episode Name	Start Time	End Time	Type	Real Value	Value Limit	Status	By
<input type="checkbox"/>	Pa Low Temp	03/14/2003 13:58:00	03/14/2003 13:58:00	Under Limit	1752.3	1753	Ans	2
<input type="checkbox"/>	CCDC Opacity	03/14/2003 13:24:00	03/14/2003 13:29:00	Over Limit	14.8	14.7	Ans	1
<input type="checkbox"/>	20 Minute SO2_Corrected Over Limit	03/14/2003 13:20:00	03/14/2003 13:39:00	Over Limit	863.5	862.5	Ans	MCDADETI
<input type="checkbox"/>	Pa Low Temp	03/14/2003 13:19:00	03/14/2003 13:23:00		0	0	Ans	2
<input type="checkbox"/>	CCDC Opacity	03/14/2003 13:18:00	03/14/2003 13:29:00		0	0	Ans	2
<input type="checkbox"/>	edtest Downtime	03/14/2003 13:15:00	03/14/2003 13:29:00		0	0	Ans	5
<input type="checkbox"/>	Pa Low Temp	03/14/2003 13:00:00	03/14/2003 13:00:00	Under Limit	1752.5	1753	Ans	2
<input type="checkbox"/>	CCDC Opacity	03/14/2003 12:42:00	03/14/2003 12:47:00	Over Limit	14.8	14.7	Ans	2
<input type="checkbox"/>	20 Minute SO2_Corrected Over Limit	03/14/2003 12:40:00	03/14/2003 12:59:00	Over Limit	862.7	862.5	Ans	MCDADETI
<input type="checkbox"/>	Pa Low Temp	03/14/2003 11:12:00	03/14/2003 11:12:00	Under Limit	1751.8	1753	Ans	2
<input type="checkbox"/>	20 Minute SO2_Corrected Over Limit	03/14/2003 10:20:00	03/14/2003 10:39:00	Over Limit	862.8	862.5	Ans	2
<input type="checkbox"/>	20 Minute SO2_Corrected Over Limit	03/14/2003 10:00:00	03/14/2003 10:19:00	Over Limit	863.6	862.5	Ans	2
<input type="checkbox"/>	Pa Low Temp	03/14/2003 08:52:00	03/14/2003 08:52:00	Under Limit	1751.8	1753	Ans	2
<input type="checkbox"/>	20 Minute SO2_Corrected Over Limit	03/14/2003 08:00:00	03/14/2003 08:19:00	Over Limit	862.7	862.5	Ans	2
<input type="checkbox"/>	CCDC Opacity	03/14/2003 07:42:00	03/14/2003 07:47:00	Over Limit	14.8	14.7	Ans	2
<input type="checkbox"/>	Pa Low Temp	03/14/2003 07:35:00	03/14/2003 07:36:00		0	0	Ans	2

FIG. 15

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Answer Selected Episodes - Microsoft Internet Explorer

Data for Selected Episodes

Episode Name	Start Time	End Time	Type	Real Value	Value Limit	Status	Reason Code	Modification Time	Who
20 Minute SO2_Corrected Over Limit	03/14/2003 13:20:00	03/14/2003 13:39:00	Over Limit	863.5	862.5	Ans	16	10/28/2003 06:57:00	2

Answer all with this Reason:

Using this Corrective Action:

FIG. 16

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File Select Channel/Time Range Change calibration columns Statistics Help														
Page 1 12 13 14														
Start Time	Channel	Type	Reg. Check	Warn Check	1-10 Reading Data	ZERO Target	1-10 Error %	1-10 Reading Data	SPAN Target	1-10 Error %	1-10 Reading Data	NID Target	1-10 Error %	Per Spc
09/03/2003 06:36	3 SO2 Corr	DAILY	PASS		0	0	0%	2445.2	2497	-1.92%	0	0		3.5
09/03/2003 06:36	3 H2S Corr	DAILY	PASS		0	0	0%	866	883	-1.7%	0	0		2.5
09/03/2003 06:36	3 CO2 Corr	DAILY	PASS		0	0	0%	17.5	17.9	-2%	0	0		2.5
09/03/2003 06:30	3 O2 Inp	DAILY	PASS	PASS	0	0	0%	44.5	44.5	0%	0	0		2
09/03/2003 06:30	3 Flv3 Inp	DAILY			-2644	0	-82.62%	702.5	320	11.95%	-999.9	0		3
09/03/2003 06:30	3 FlvA Inp	DAILY			703	320	11.97%	-2648	0	-82.75%	-999.9	0		3
09/02/2003 06:37	3 SO2 Corr	DAILY	PASS		0	0	0%	2641.5	2497	5.35%	0	0		3.5
09/02/2003 06:37	3 H2S Corr	DAILY	PASS		0	0	0%	930.6	883	4.76%	0	0		2.5
09/02/2003 06:37	3 CO2 Corr	DAILY			0	0	0%	19	17.9	5.5%	0	0		2.5
09/02/2003 06:30	3 O2 Inp	DAILY	PASS	PASS	0	0	0%	44.5	44.5	0%	0	0		2
09/02/2003 06:30	3 Flv3 Inp	DAILY			2643.9	0	-82.62%	702.4	320	11.95%	-999.9	0		3
09/02/2003 06:30	3 FlvA Inp	DAILY			702.9	320	11.97%	2647.8	0	-82.74%	-999.9	0		3
09/01/2003 06:36	3 SO2 Corr	DAILY	PASS		0	0	0%	2465.9	2497	-1.15%	0	0		3.5
09/01/2003 06:36	3 H2S Corr	DAILY	PASS		0	0	0%	873.1	883	-0.99%	0	0		2.5
09/01/2003 06:36	3 CO2 Corr	DAILY	PASS		0	0	0%	17.7	17.9	-1%	0	0		2.5
09/01/2003 06:30	3 O2 Inp	DAILY	PASS	PASS	0	0	0%	44.5	44.5	0%	0	0		2

FIG. 17

NetDAHS - Calibration History Details - Microsoft Internet Explorer

### Detail of Channel/Calibration Configuration

Channel: **3\_CO2\_Corr**  
 Start Time: **05/06/2004 14:57**  
 End Time: **05/06/2004 14:59**  
 CalSet Name: **DAILY**  
 Warn Range: **20**  
 Reg Range: **20**  
 AutoCal TOD: **0**  
 Check Time: **0**  
 Status Hold: **0**  
 Perf. Spec.: **2.5**  
 APS Flag: **False**  
 OOC Hours: **0**  
 PLC: **GE 90/70**  
 A-to-D Range: **740**  
 Numerator: **10000**  
 Denominator: **2700**  
 Skew: **-919**  
 PerfSpec is a value not % (sometime set for CO2 & O2): **0**  
 This is a low emitter NOx or SO2 channel (AltPerfSpec): **0**

#1	
Warning Check	PASS/FAIL
Regulatory Check	PASS/FAIL

### Detail of Gas Steps

	Zero	Mid	Span
Reading (ppm)	0	0	16.4
Target (ppm)	0	0	17.9
WarnChk Limit	0.8		0.8
WarnChk Drift	0	0	1.5
RegChk Error	0%		-7.8%
Step	1	2	3
Gases	0000	0000	0000
Settle Time	0	0	0
Noise	0	0	0

Newer Edit  
Older  
Close Detail

### Performance Specification

Performance Specification as defined by EPA. Can be a percentage (of the Regulatory Range for Daily cals or the Target for CGA cals) or be a Units of Measure value (such as 1.5 ppm or 0.5 % CO2 ) Note: Regardless of PerfSpec the minimum errors are 5 ppm or 0.5 %CO2/O2.

### Warning Check

This is non-regulatory pass/fail determination and is separately configurable from Performance Specification. It is based on the "Warning Range". When the drift exceeds the "WarnChk drift" limit above you will get a failed configuration for the appropriate target(s).

### Regulatory Check

This uses the EPA's regulations governing Performance Specification (note that Daily cals are not out of control until you have exceeded 2\*PerfSpec) and "Span" (which we call the "Regulatory Range" since the term "Span" was already in use to describe one of the drift checks).

### Warning Range

This is the analyzer's physical signal range. Example: You may have a 1000 ppm NOx analyzer with a 4-20 mA signal. The warning range would be 1000.

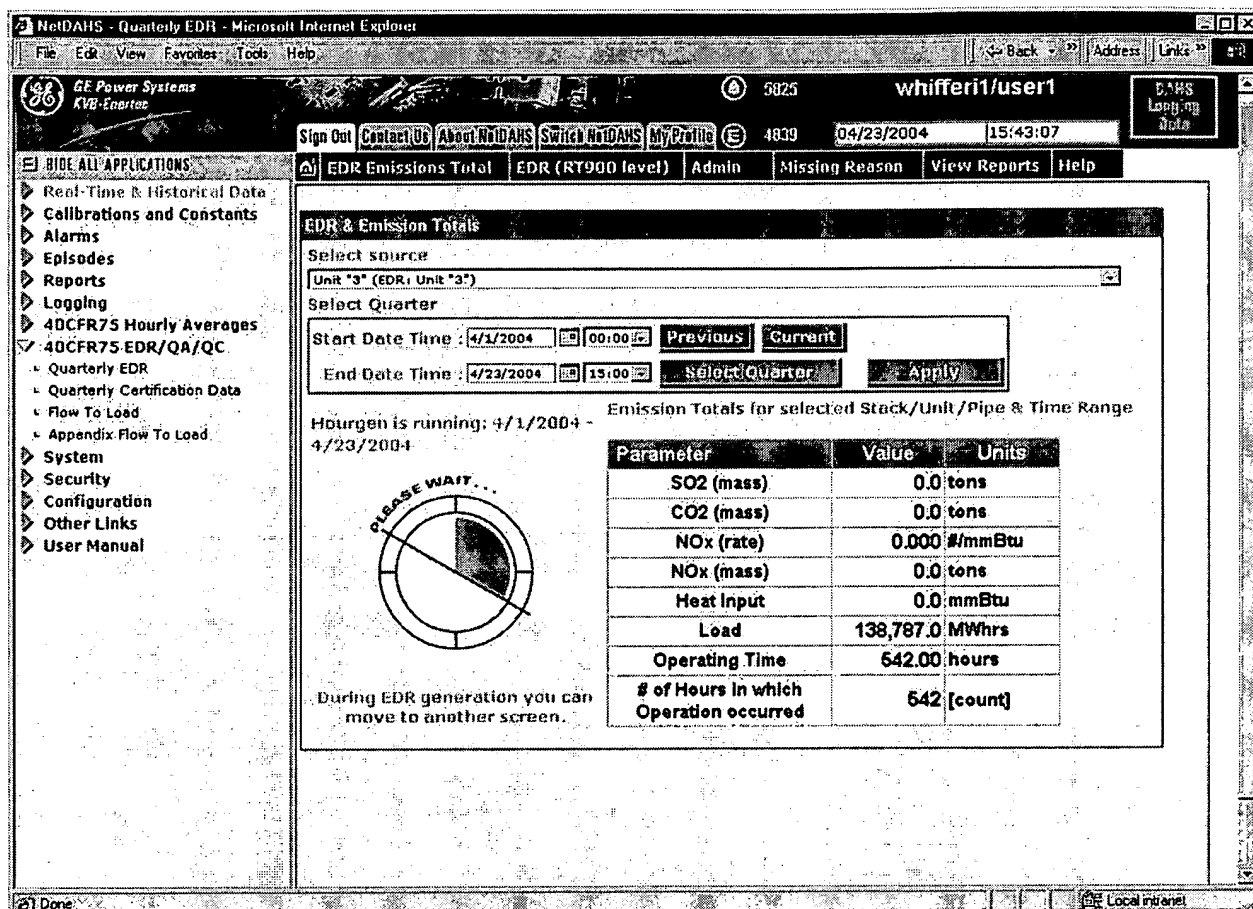
### Regulatory Range

This is the EPA's "Span" and is used with PerfSpec to perform the Regulatory Check. If the above analyzer had an EPA "Span" of 600 ppm then the Regulatory Range would be 600.

Done Local intranet

FIG. 18





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**FIG. 21**

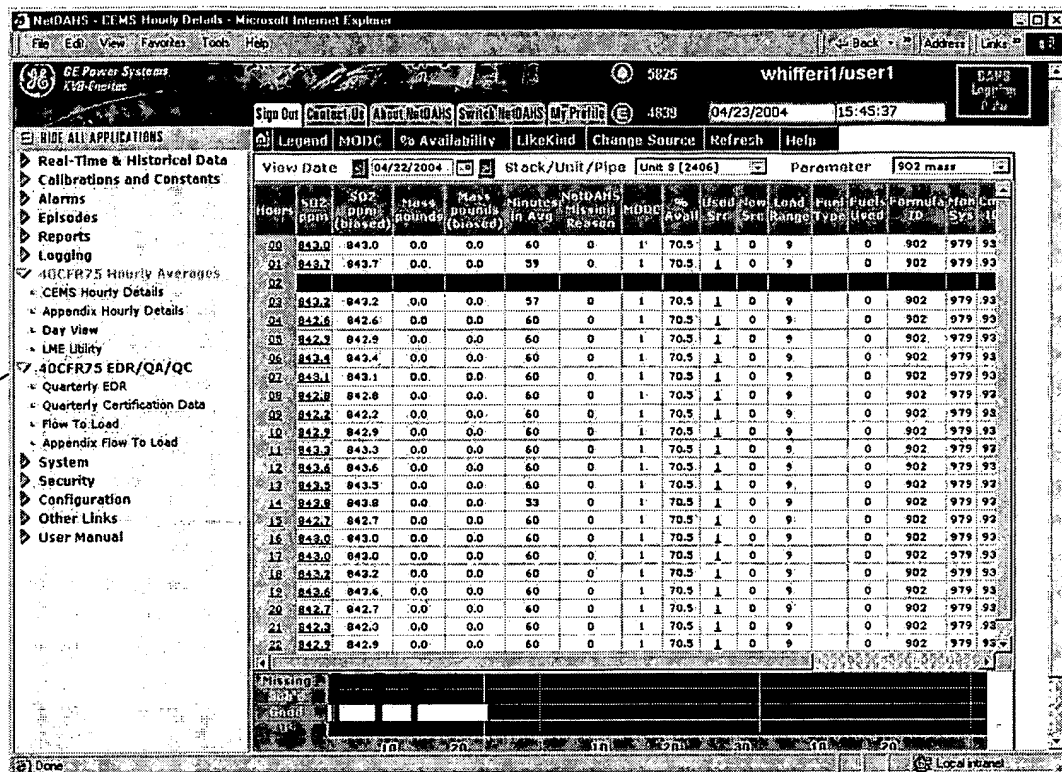


FIG. 22

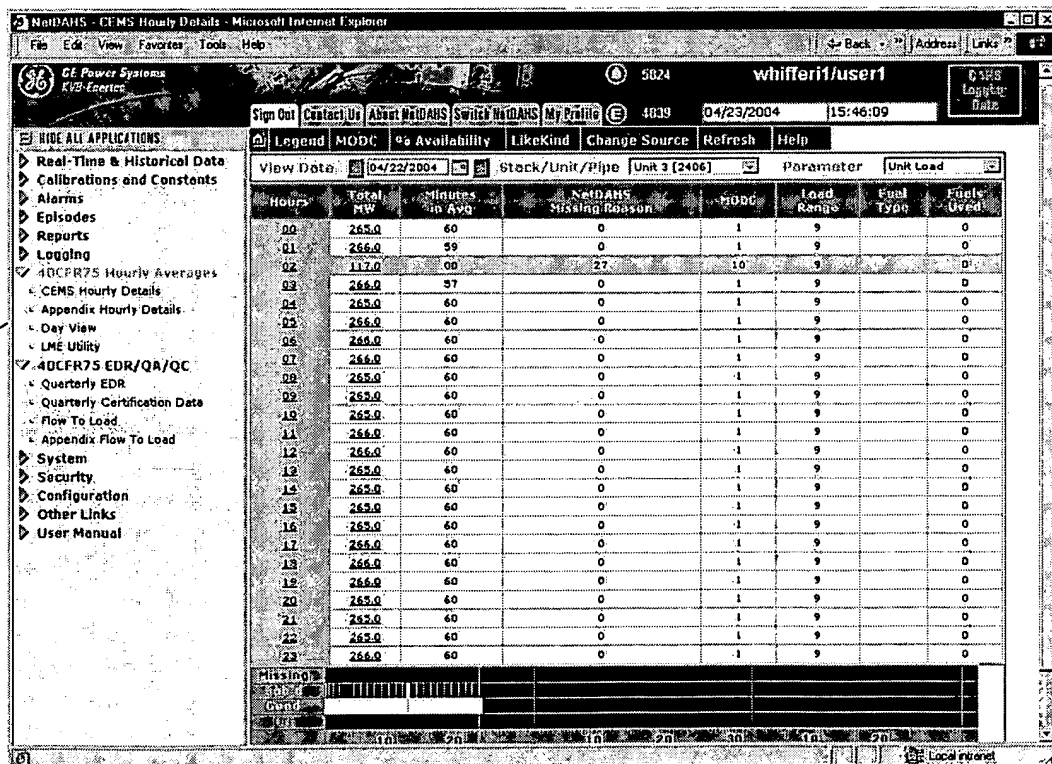


FIG. 23